ENVIRONMENTAL

Fact Sheet



29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

BB-47 2002

Fecal Accidents – A Protocol for Public Bathing Facilities

Fecal accidents occasionally occur in swimming pools, wading pools, spas, and special recreation pools. If these accidents are not treated, they can lead to serious illnesses. Bacteria and other pathogens that are introduced to the water could easily be swallowed, inhaled, or absorbed through the skin, resulting in a health risk to the swimmers.

If a fecal accident does occur, the NH Department of Environmental Services suggests that the facility take the following actions.

A. Liquid Stool:

(These procedures can be followed after a DES bacterial violation, as well.)

- 1. Advise all bathers to exit the bathing facility immediately and not to reenter until all decontamination procedures are completed.
- 2. Shut down filtration system. Remove all fecal matter using a fine mesh net or scoop. Dispose of waste in a sanitary manner. Vacuuming is not recommended. Clean and disinfect the net or scoop. Restart the system once removal is complete.
- 3. Raise the free chlorine level in the pool to 20 mg/L (ppm) (pH = 7.2-7.5) and maintain for at least 8 hours, or bring to 10 mg/L (ppm) (pH = 7.2-7.5) and maintain for at least 16 hours. Keep the pool closed during this time period.
- 4. After 3 to 4 turnovers, backwash sand filters or disassemble and clean diatomaceous earth and cartridge filters using a solution of 20 parts of water to 1 part 12%-15% sodium hypochlorite (liquid chlorine).
- 5. If an accident occurs in a spa, wading pool, or other small volume pool, drain it completely. When a public bathing facility is drained by discharge to a municipal sewer, the free disinfectant residual must not exceed 3 mg/L chlorine or bromine. Disinfectant residual can be neutralized by adding sodium thiosulfate. Scrub the interior surface of these small volume facilities and disinfect with a solution of 20 parts of water to 1 part 12%-15% sodium hypochlorite (liquid chlorine). Then refill with fresh water.
- 6. Check the chlorine level. Before reopening, the chlorine levels shall be 1-3 mg/L for swimming pools, wading pools, and special recreation pools. The chlorine level for a spa must be no greater than 10 mg/L. If the chlorine levels are still very high you can use sodium thiosulfate to neutralize.

Just remember that a little sodium thiosulfate goes a long way.

7. Balance water. Reopen the pool.

B. Solid Stool (or Vomit):

- 1. Advise all bathers to exit the bathing facility immediately and not to reenter until all decontamination procedures are completed.
- 2. Shut down filtration system. Remove all fecal matter using a fine mesh net or scoop. Dispose of waste in a sanitary manner. Vacuuming is not recommended. Clean and disinfect the net or scoop. Restart the system once removal is complete.
- 3. "Spot treat" the contamination area with 10-12 oz. of 12%-15% sodium hypochlorite (liquid chlorine) or 2 oz. of granular chlorine. Raise the free chlorine level in the pool to 3.0 mg/L (ppm) (pH = 7.2-7.5), if it is < 3.0 mg/L, and maintain for at least 1 hour. Keep the pool closed during this time period.
- 4. Balance water. Reopen the pool.

The only way to be sure that the pool is free of contamination is to test the water for fecal coliform or *Escherichia coli*. A water sample can be submitted to a certified laboratory to analyze the water for bacteria. For more information on water sampling and analysis, you can call the Department of Environmental Services Laboratory at (603) 271-3445.

Establish a fecal accident log. Document each fecal accident by recording the date and time of the event, solid or liquid stool, free available chlorine concentration at the time of the event and before opening the pool, the pH, and the procedures followed to respond to the fecal accident.

Tips That May Reduce Fecal Contamination:

- Keep bathhouse, pool deck, and surrounding areas clean and sanitary.
- Prevent people that are suffering from diarrhea, a fever, cough, cold, inflammation of the
 eyes, nasal or ear discharges, or any communicable disease from entering the bathing
 place.
- Teach children and bathers not to swallow pool water (also not to chew gum or eat while swimming).
- Encourage parents to take children for bathroom breaks often.
- Have designated areas for changing diapers in bathroom or elsewhere away from the pool and encourage parents to use them.
- Provide special swimmer diapers, but please be aware that these are not foolproof.
- Encourage parents and bathers to wash their hands and body with soap and water after using the bathroom or changing diapers.
- Prevent dogs, birds, and other animals from entering the bathing place.
- Keep a close watch on the pool and the bathers who use it.

For more information on public pools and spas contact DES's Public Bathing Facility Program at 603-271-7108. For a copy of the Public Bathing Facility Rules, Env-Ws 1100, call the DES Public Information Center at (603) 271-2975, or go to http://www.des.nh.gov/desadmin.htm.